

## ABSTRACT

A method for transmitting packet data in a radio telecommunications system including a plurality of radio transmitters and radio receivers that use a dynamic multiple access method for separating users at least by means of a time-slot separation method, in particular a "time division multiple access" (TDMA) method, in addition to methods for secure data transmission, in particular an "automatic repeat request" (ARQ) method. If a renewed transmission of a data packet is required, a repeat slot is inserted and frequencies are assigned to radio transmitters and radio receivers in such a way that each transmitter or receiver is allocated a unique identifying frequency. A frequency-slot separation method can be implemented for the duration of the repeat time-slot in such a way that a data packet to be repeated, which is destined for a radio transmitter or radio receiver, is transmitted on the frequency identifying said transmitter or receiver and in each radio transmitter or radio receiver a frequency is selected in such a way that said transmitter or receiver searches for a repeated data packet on their respective identifying frequency.